



HAKKO 853 PREHEATER

預備加熱 Instruction Manual 使用說明書 日本白光牌

English

Thank you for purchasing the Hakko 853.
This unit preheats electronic printed wiring boards.
Please read this manual before operating the Hakko 853.
Keep this manual readily accessible for reference.

承蒙惠顧，謹到謝忱。本產品是預備加熱電路板的裝置。
使用Hakko853前，請詳閱本使用說明書，正確使用。
閱後請妥收存，以備日後查閱。

中文

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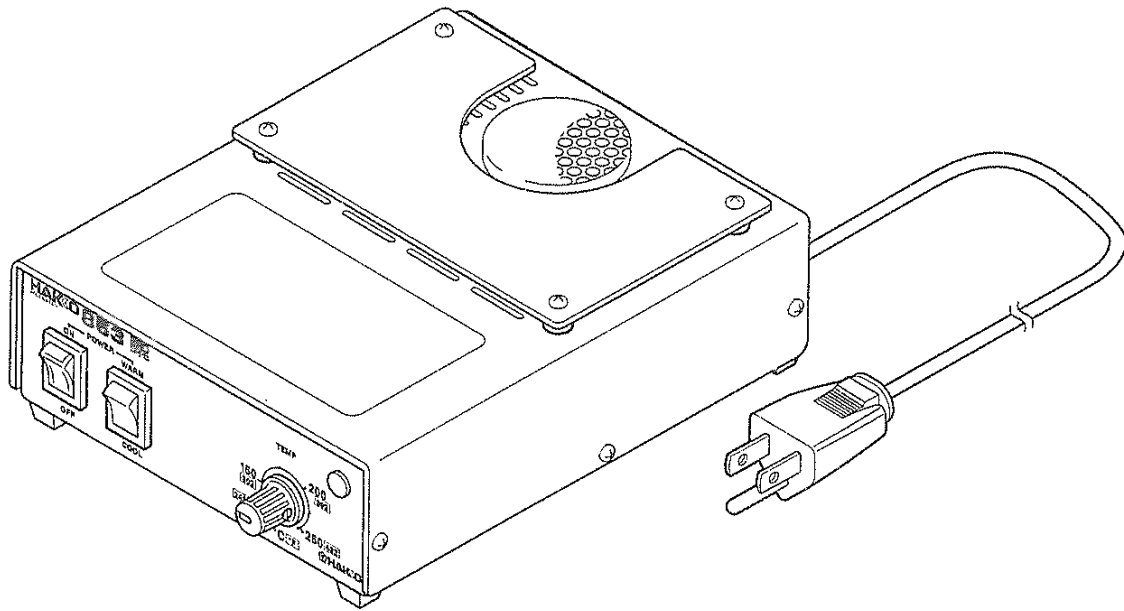
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PACKING LIST

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English



SPECIFICATIONS


Name	Hakko 853
Power consumption	100V-350W 110V-400W 120V-500W 220V-460W 230V-500W 240V-540W
Hot air temperature	120~250°C. (248~482°F.)
Air flow	0.18m ³ /min. (6.35ft ³ /min.)
Outer dimension	170 (l) x 140 (w) x 60 (h), mm. (6.7 (l) x 5.5 (w) x 2.4 (h), in.)
Weight (w/cord)	1kg. (2.2lbs.)

- * Specifications and design are subject to change without notice.
- * This product is protected against electrostatic discharge.

WARNINGS, CAUTIONS

Warnings and cautions are placed at critical points in this manual to direct the operator's attention to significant items. They are defined as follows:

 **WARNING:** Failure to comply with a WARNING may result in serious injury or death.

 **CAUTION:** Failure to comply with a CAUTION may result in injury to the operator, or damage to the items involved. Two examples are given below.

CAUTION

When power is ON, air outlet temperatures will be between 120° and 250°C. (248° and 482°F.). To avoid injury or damage to personnel and items in the work area, observe the following:

- Do not touch the hot air outlet with your bare hands.
- Do not use ignitable gases, ignitable materials, or flammable objects close to the unit.
- Do not blow ignitable substances, ignitable objects, or flux onto the outlet.
- Do not insert anything into the outlet.
- Do not use with the outlet obstructed or with the unit surrounded by other objects.
- Inform other people in the area that the unit is hot and dangerous.
- Turn off the power when no longer using or when leaving the unit unattended.
- Before replacing parts or storing, cool the unit and then turn off the power.

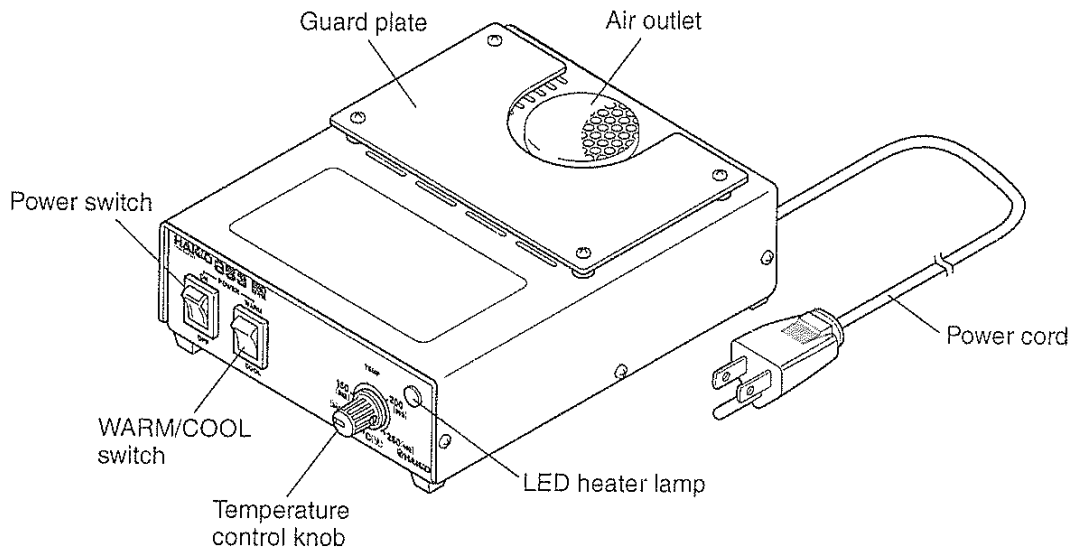
CAUTION

To prevent accidents or damage to the Hakko 853, be sure to observe the following:

- Do not use for any purpose other than preheating.
- Limit continuous use to approximately one hour.
- Be sure to ground the unit.
- Do not modify this unit.
- Use only genuine replacement parts.
- Do not place in water or use with wet hands.
- Hold the plug when connecting and disconnecting the cord.
- Avoid any other actions considered to be dangerous.

PART NAMES

English



OPERATING INSTRUCTIONS

PREPARATION

Refer to the figure as shown at the right, and position the Hakko 853 and printed wiring board.

POWER ON

① Set the WARM/COOL switch to COOL and turn the power OFF.

② Plug in the power cord.

⚠ CAUTION:

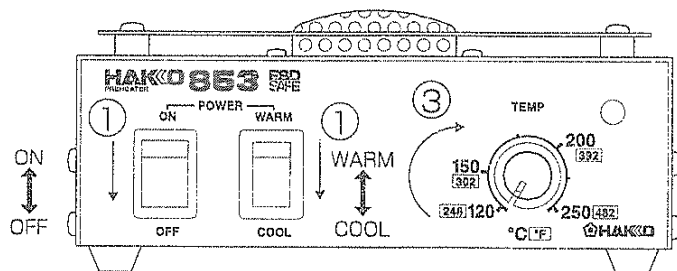
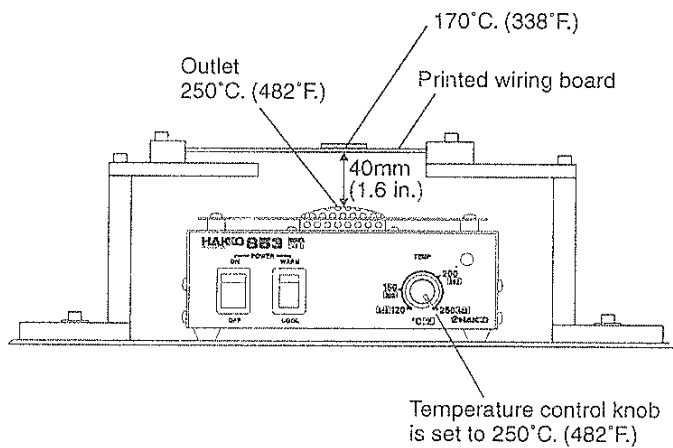
This unit is protected against electrostatic discharge. Be sure to ground the unit.

③ Set the temperature.

④ Turn power ON.

⚠ CAUTION:

Make sure the outlet is not obstructed before turning the power ON.



OPERATING INSTRUCTIONS

- ⑤ Set the WARM/COOL switch to WARM.

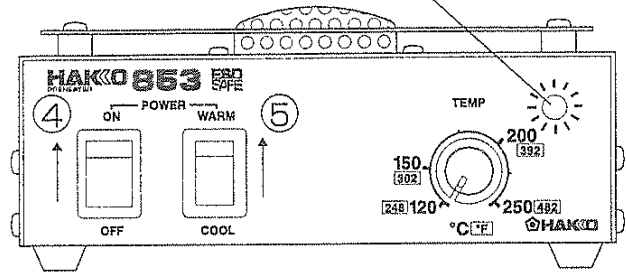
⚠ CAUTION:

Hot air is discharged. Preheating begins.

AFTER USE

- ① Set the WARM/COOL switch to COOL to cool the unit.
- ② Make sure the unit is completely cool, then turn the power OFF.

- ⑤ The LED heater lamp will light. When the designated temperature is reached, the lamp will flash.



TROUBLE SHOOTING

⚠ WARNING

- Unless otherwise directed, carry out these procedures with the power switch OFF and the power cord UNPLUGGED.
- If the power cord is damaged, it must be replaced only by the manufacturer or an authorized Hakko repair facility to preclude damage to either the unit or injury to personnel.
- Be sure the unit has cooled to room temperature before beginning work.

TROUBLE-SHOOTING GUIDE

- Unit does not operate when power turned ON.

- Air is not discharged.

- Air does not become hot when WARM/COOL switch is set to WARM after power ON.

CHECK Is the fuse blown?

Investigate why the fuse blew and then replace the fuse. If the cause can not be determined, just replace the fuse. If the fuse blows again, send the unit in for repair.

CHECK Is the fan motor working?

Turn the fan by hand and check if the blades turn smoothly. If there is a problem, replace the fan or send the unit in for repair.

CHECK Is the heating element broken?

Measure the resistance value of the heating element as described on page 5.

CHECK Is the sensor broken?

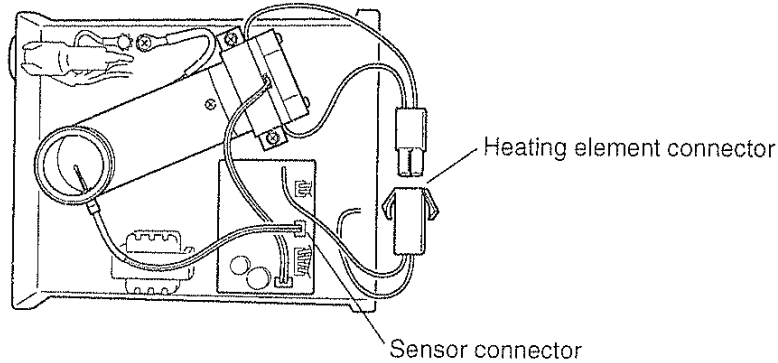
Measure the resistance value of the sensor as described on page 5.

CHECK Is the printed wiring board broken?

Check the printed wiring board visually for burned parts. If there are parts with burn damage, replace the wiring board or send the unit in for repair.

RESISTANCE MEASUREMENT FOR INVESTIGATING BROKEN HEATING ELEMENT AND SENSOR

ENGLISH



● Heating element resistance measurement

● Sensor resistance measurement

⚠ CAUTION:

Measure the heating element and sensor at room temperature.

Remove the heating element connector and measure the resistance.

100~110Ω (220~240V)

Heating element resistance value: 25~30Ω (100~120V),
If the resistance value is incorrect, replace the heating element. (See the instructions included with the replacement heating element regarding how to replace the heating element.)

Remove the sensor connector and measure the resistance.

Sensor resistance value: 200-250 kΩ

If the resistance value is incorrect, replace the sensor. (See the instructions included with the replacement sensor regarding how to replace the sensor.)

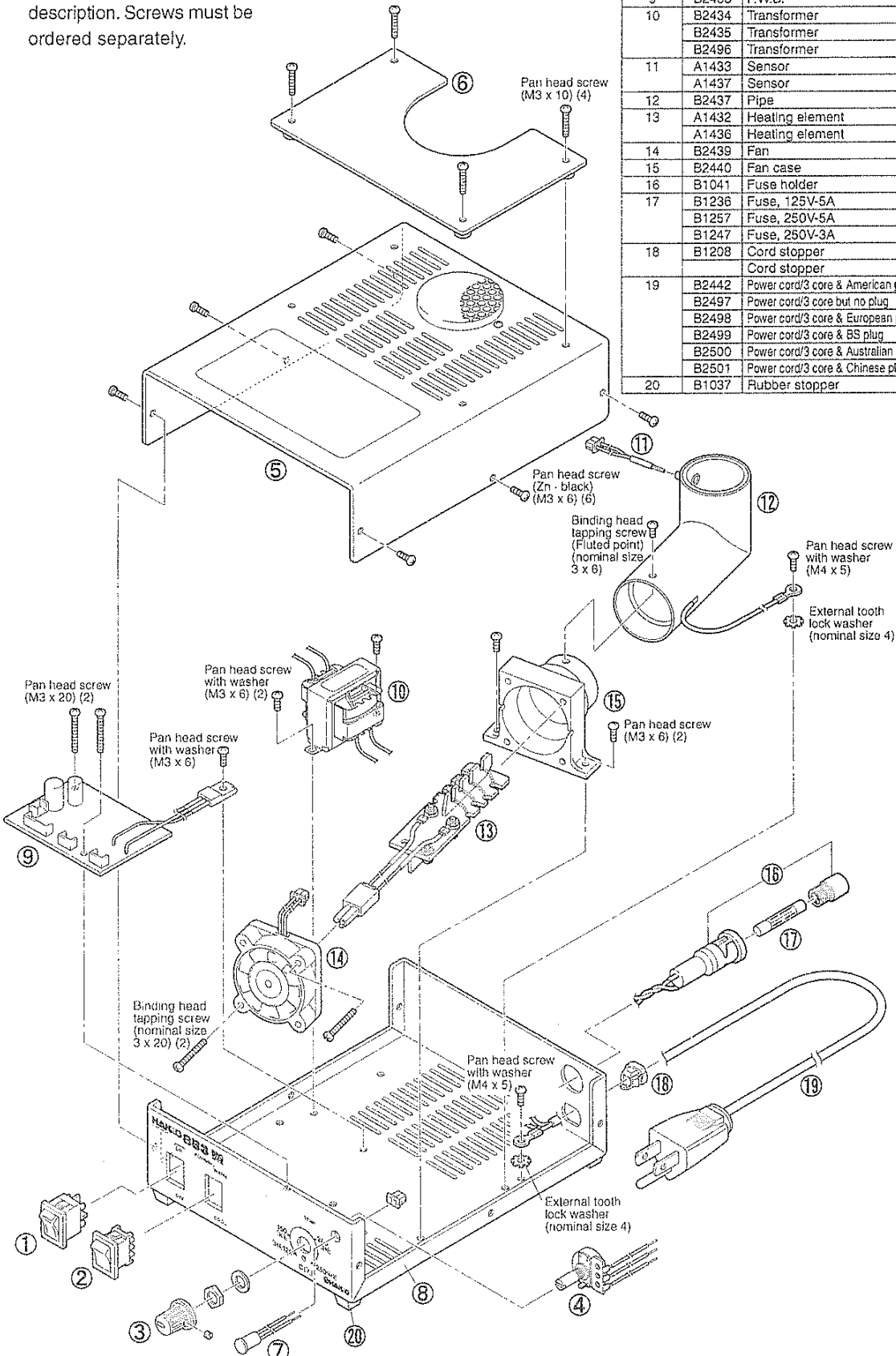
MAINTENANCE

Wipe any flux deposits from the outlet and guard plate.

PARTS LIST

* Spare or repair parts do not include mounting screws, if they are not listed on the description. Screws must be ordered separately.

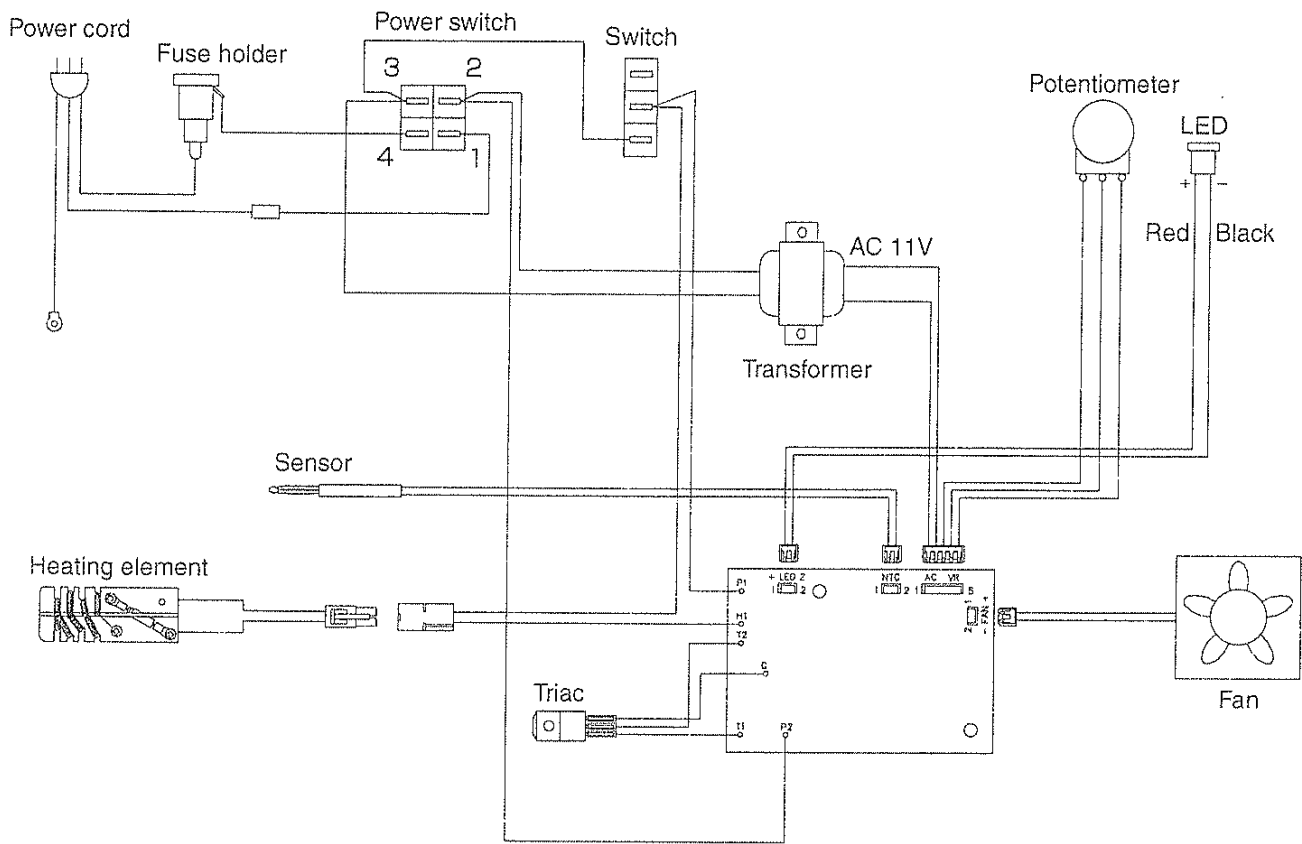
Item No.	Part No.	Part name	Description
1	B1487	Power switch	
2	B1906	Switch	
3	B1904	Knob	w/a screw
4	B2427	Potentiometer	
5	B2428	Cover	
6	B2429	Guard plate	
7	B2430	LED lamp	
8	B2431	Chassis	w/Rubber stopper
	B2432	Chassis / UL	w/Rubber stopper
9	B2433	P.W.B.	100-120V, 220-240V
10	B2434	Transformer	100-110V
	B2435	Transformer	120V
	B2496	Transformer	220-240V
11	A1433	Sensor	100-120V
	A1437	Sensor	220-240V
12	B2437	Pipe	
13	A1432	Heating element	100-120V
	A1436	Heating element	220-240V
14	B2439	Fan	
15	B2440	Fan case	
16	B1041	Fuse holder	
17	B1236	Fuse, 125V-5A	100-110V
	B1257	Fuse, 250V-5A	120V
	B1247	Fuse, 250V-3A	220-240V
18	B1208	Cord stopper	100-120V, 220-240V
		Cord stopper	120V
19	B2442	Power cord/3 core & American plug	
	B2497	Power cord/3 core but no plug	
	B2498	Power cord/3 core & European plug	Korea
	B2499	Power cord/3 core & BS plug	India
	B2500	Power cord/3 core & Australian plug	
	B2501	Power cord/3 core & Chinese plug	
20	B1037	Rubber stopper	set of 4



English

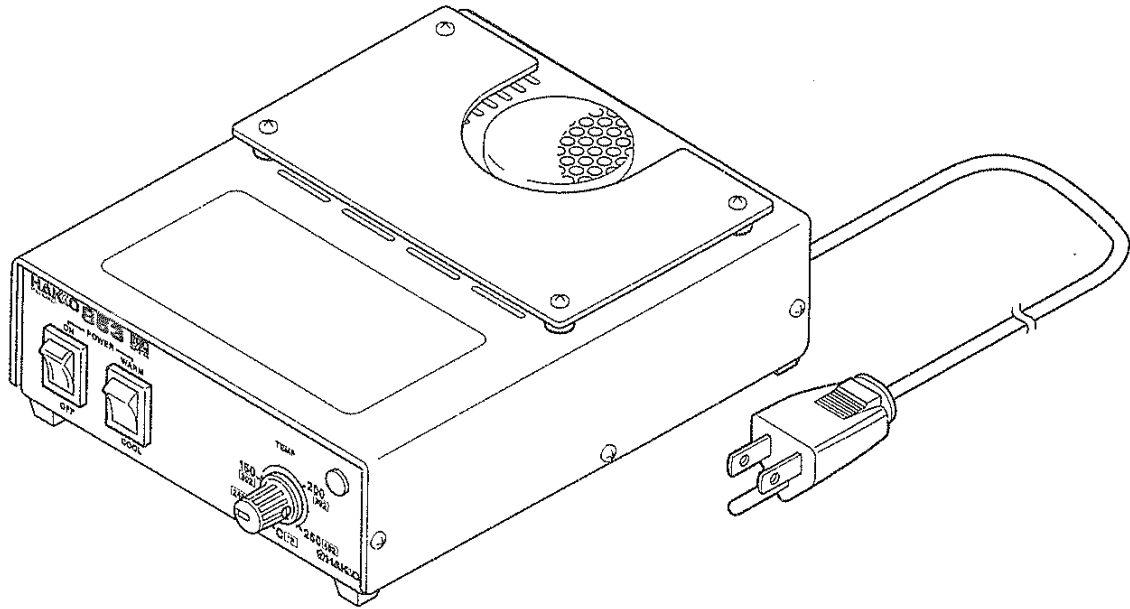
WIRING DIAGRAM

English



包裝清單

Hakko853 本體 1
 使用說明書 1



規 格


名稱	Hakko853	
總耗電量	100 伏特 - 350 瓦特	110 伏特 - 400 瓦特 120 伏特 - 500 瓦特 220 伏特 - 460 瓦特 230 伏特 - 500 瓦特 240 伏特 - 540 瓦特
溫度範圍	120 度 ~ 250 度 (吹風口附近)	
外形體積	140(寬) × 60(高) × 170(深)	
重量	約 1 Kg (包括電源線)	
風量	0.18 立方米 / 分	


* 本產品有防靜電處理。

* 規格及外觀可能改變，恕不另行通知。

安全及使用上的注意事項

本說明書之‘警告’和‘注意’的定義如下。

 **警告：** 濫用可能導致使用者死亡或重傷。

 **注意：** 濫用可能導致使用者受傷或對涉及物體造成實質破壞為您本人安全著想，請嚴格遵守‘注意事項’。

注 意

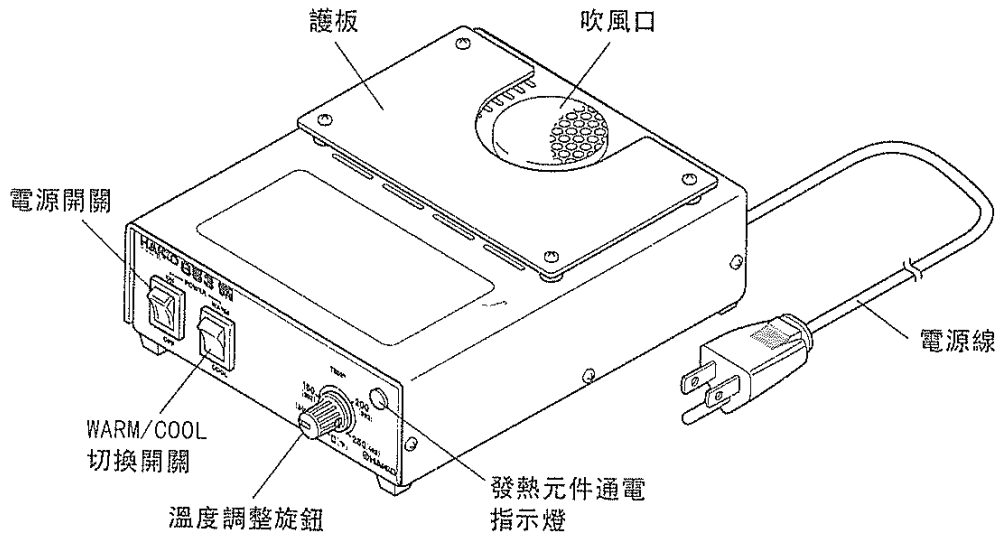
當電源接通時，熱氣吹風口溫度高達到 120 度～250 度。
鑒於濫用可能導致使用者灼傷或火患，請嚴格遵守以下事項。

- 切勿觸熱氣吹風口嘴及其周圍。
- 切勿在易燃物體附近使用。
- 切勿將易燃物、易燃性、助焊劑等東西吹到吹風口。
- 切勿將異物放進吹風口。
- 通知周圍的人，吹風口極為灼熱，可能引發危險事故。
- 使用暫停，結束或要離開時，關掉電源。
- 更換部件或收拾本體時，應關掉電源並待冷卻至室溫。

● 為免損壞本產品，及保持作業環境之安全，應遵守下列事項

- 切勿使用預備加熱以外的工作。
- 切勿連續使用超過 1 小時。
- 務必接地使用。
- 切勿擅自改動本產品。
- 更換零件時，應採用 HAKKO 原件。
- 切勿弄濕本體，或手濕時也不能使用。
- 拔出電線時，請抓住插頭。
- 使用本體時，不可作任何可能傷害身體或損壞物體的妄動。

部件名稱



使用方法

準備

以右列溫度為標準，設定 853 及電路板。

打開電源

- ① 將 WARM/COOL 切換開關轉到 COOL，電源開關轉到 OFF。
- ② 將電源插頭插入電源插座。

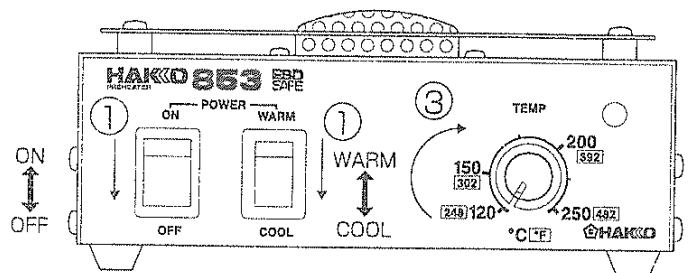
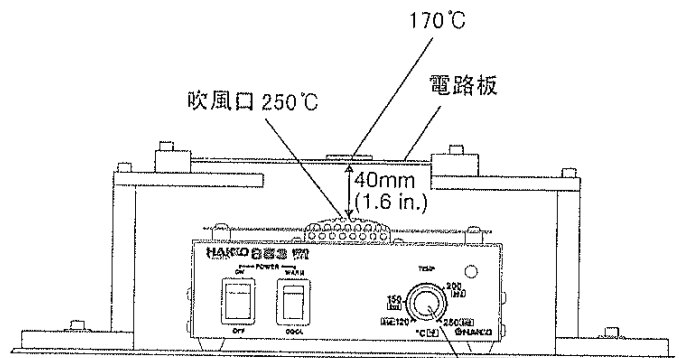
⚠注意

本機有防靜電處理，請務必接地之後才使用。

- ③ 調整溫度。
- ④ 打開電源開關。

⚠注意

請確認吹風口周圍未被阻擋之後才打開電源開關。



母
X

使用方法

⑤ 將 WARM/COOL 切換開關轉到 WARM。

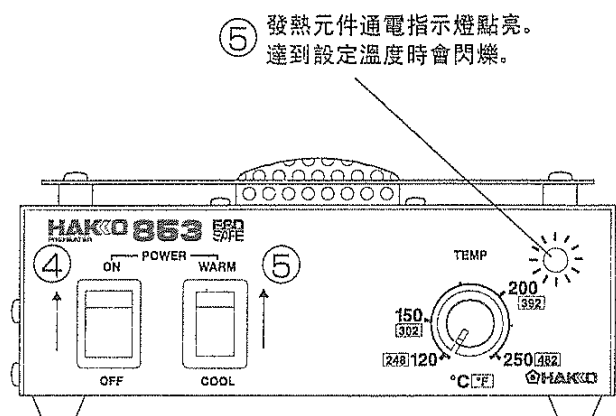
△注意

熱風送出。預熱開始。

作業結束後

① 將 WARM/COOL 切換開關轉到 COOL，使機體冷卻。

② 確認機體完全冷卻之後，關掉電源開關。



排除故障指南

警告

- 進行維修之前應關掉電源，否則可能發生觸電事故。
- 若電線損壞，應請廠家或其維修服務代理商或類似之合格人士修理，以免發生傷害身體或損壞本體。
- 請待機體充分冷卻後再進行作業。

以
母

● 打開電源開關後沒有動作。

● 沒有吹風。

● 打開電源並將 WARM/COOL 切換開關轉到 WARM，但沒有熱風吹出。

檢查：保險絲是否燒斷？

處理：確認保險絲為何燒斷之原因後，更換之。

檢查：風扇馬達是否停止？

處理：用手轉動，檢查扇葉是否卡住。如果異常的話更換之。

檢查：發熱元件是否燒斷？

處理：測定發熱元件之電阻值。（參照第 5 頁）

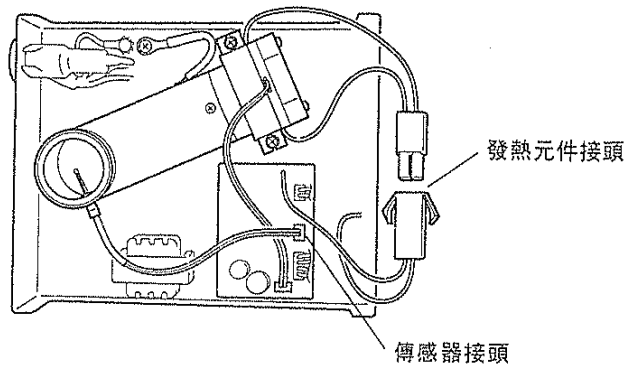
檢查：傳感器是否燒斷？

處理：測定傳感器之電阻值。（參照第 5 頁）

檢查：電路板是否壞掉？

處理：查看電路板之外觀，部件是否燒斷破損。有燒斷破損時更換之。

發熱元件、傳感器燒斷及其電阻值之檢查方法



●測定發熱元件之電阻值。

△注意

發熱元件、傳感器請在常溫之下測定之。

拆下發熱元件接頭後測定其電阻值。

發熱元件電阻值 25~30Ω (100~120V), 100~110Ω (220~240V)

電阻值異常時請更換發熱元件。(更換方法請參照更換部件所附之說明書。)

●測定傳感器之電阻值。

拆下傳感器接頭後測定其電阻值。

傳感器電阻值 200 ~ 250K Ω

電阻值異常時請更換傳感器。(更換方法請參照更換部件所附之說明書。)

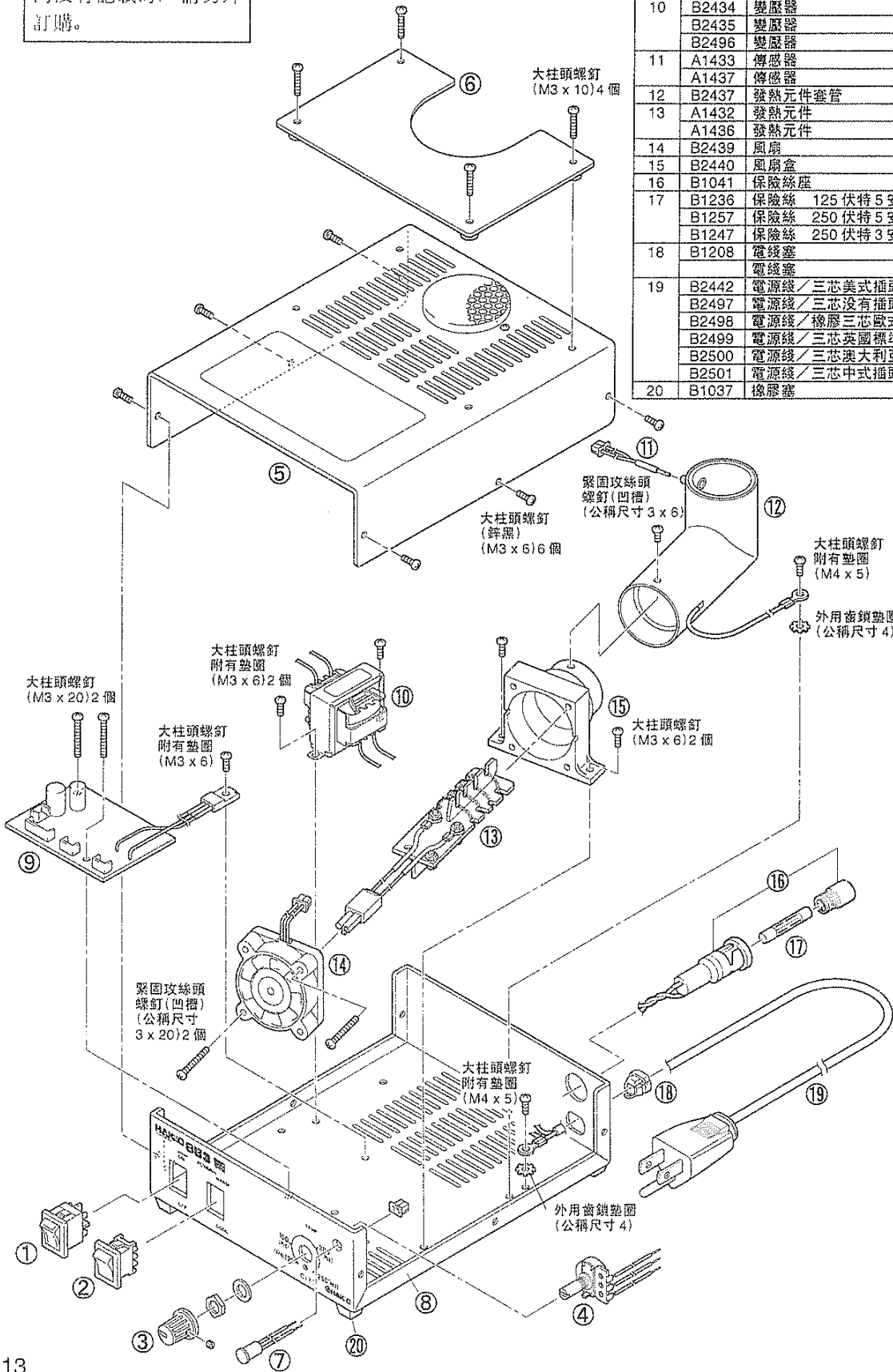
保 養

助焊劑如果附在吹風口或護板時，請擦拭之。

部件清單

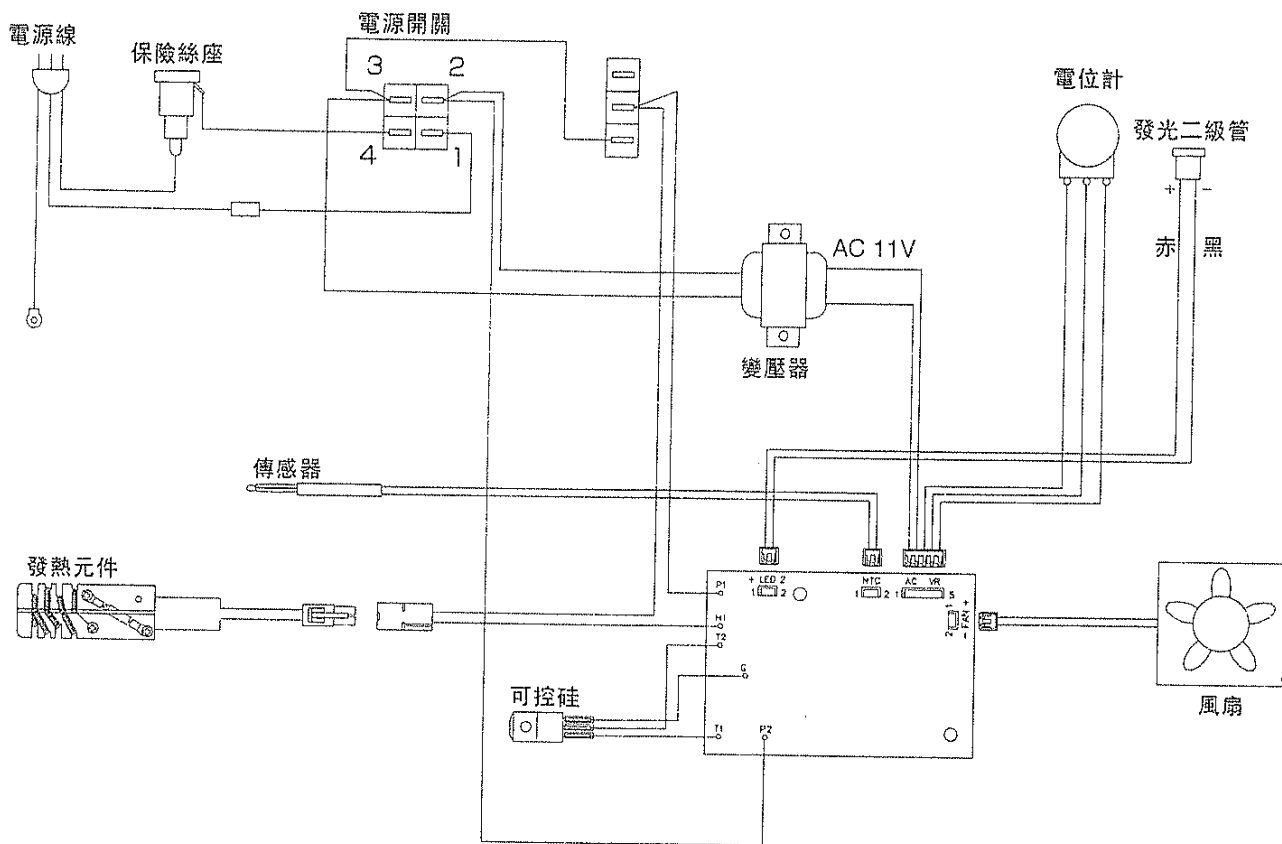
註：
安裝螺絲如果在規格表內沒有記載時，請另外訂購。

圖號	編號	部件名稱	規格
1	B1487	電源開關	
2	B1906	更換開關	
3	B1904	施鈕	附螺釘
4	B2427	電位計	
5	B2428	外蓋	
6	B2429	護板	
7	B2430	發熱元件通電指示燈	
8	B2431	底盤	附橡膠塞
	B2432	底盤 (UL)	附橡膠塞
9	B2433	印刷電路板	100-120V, 220-240V
10	B2434	變壓器	100-110V
	B2435	變壓器	120V
	B2496	變壓器	220-240V
11	A1433	傳感器	100-120V
	A1437	傳感器	220-240V
12	B2437	發熱元件套管	
13	A1432	發熱元件	100-120V
	A1436	發熱元件	220-240V
14	B2439	風扇	
15	B2440	風扇盒	
16	B1041	保險絲座	
17	B1236	保險絲 125 伏特 5 安培	100-110V
	B1257	保險絲 250 伏特 5 安培	120V
	B1247	保險絲 250 伏特 3 安培	220-240V
18	B1208	電線塞	100-120V, 220-240V
		電線塞	120V
19	B2442	電源線 / 三芯美式插頭	
	B2497	電源線 / 三芯沒有插頭	
	B2498	電源線 / 橡膠三芯歐式插頭	韓國
	B2499	電源線 / 三芯英國標準插頭	印度
	B2500	電源線 / 三芯澳大利亞插頭	
20	B1037	橡膠塞	附 4 個



中文

電路圖





HAKKO CORPORATION

HEAD OFFICE

TEL:+81-6-6561-3225 FAX:+81-6-6561-8466
<http://www.hakko.com> E-mail:sales@hakko.com

OVERSEAS AFFILIATES

U.S.A.: AMERICAN HAKKO PRODUCTS, INC.

TEL: (661) 294-0090 FAX: (661) 294-0096

Toll Free (800)88-HAKKO

<http://www.hakkousa.com>

HONG KONG: HAKKO DEVELOPMENT CO., LTD.

TEL: 2811-5588 FAX: 2590-0217

<http://www.hakko.com.hk>

E-mail:info@hakko.com.hk

SINGAPORE: HAKKO PRODUCTS PTE., LTD.

TEL: 6748-2277 FAX: 6744-0033

<http://www.hakko.com.sg>

E-mail:sales@hakko.com.sg

Please access to the following address for the other Sales affiliates.

<http://www.hakko.com/address>

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